

FIVE DILEMMAS IN PUBLIC PROCUREMENT

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ABSTRACT. Procurement systems in democratic governments across the globe face competing demands, conflated values and goals, and are being called upon to address societies “wicked” problems under the rubric of government “reform.” As a result, government purchasing professionals are being challenged to develop new flexible structures and processes that devolve purchasing responsibility, yet maintain accountability and control; limit the opportunity for fraud/mismanagement while reducing operational constraints; increase economic efficiency while satisfying political demands for minority/local/small and women owned business participation; increase open and transparent competition while achieving best value; and applying best practices while confronting legal limitations. Essentially these dilemmas have placed public procurement at the forefront of government reform efforts. The current study delineates the nature of five dilemmas that purchasing practitioners face, and the implications of these dilemmas for purchasing in the public sphere are explored. Given the complexity of these dilemmas, procurement professionals will be continually called upon to balance these inherent tensions with little guidance from policymakers or elected officials.

INTRODUCTION

The link between poor procurement practices in government and economic growth are unambiguous (Pagell, Wasserman & Zhaohui, 2010; McCue, Buffington, & Howell, 2007). Therefore governmental

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reform efforts that attempt to increase economic growth will not only require an understanding of the complex nature of public procurement, but reform efforts in the public domain must also simultaneously address issues of accountability, transparency, fairness, and economic efficiency (Schiele, 2009; Lenders & Fearon, 2008; Kattel & Lember, 2010). Thus the particularly complex nature of public procurement makes coordination among numerous segments—whether they be governments, businesses (suppliers), or political actors—of society critical to the successful implementation of strategies that might promote accountability and improve governance (Blair, 2000; Benner, Reinicke, & Witte, 2004). Yet, little is known about the various values and goals that underlie the public sector procurement process, other than noting there is a host of conflated and conflicting values and goals that purchasing professionals must attend to on a daily basis.

This may not be overly problematic if those charged with determining which value or goal is to be selected over other values and goals. For example, public purchasing professionals are constantly called upon to provide goods or services to their respective entities efficiently. However, there may be competing demands, such as a “buy local” preference (Tucker, 1998; Thai, 2001; Ssenoga, 2006) that may inhibit the actualization of efficiency (Qiao, Thai & Cummings, 2009). Moreover, given that democratic governments across the globe promote open and fair competition in the purchasing process (Trybus, 2006), the realization of these values have a direct relationship to the costs of doing business. When confronted with these situations, where do purchasing professionals turn to for deciding which value or goal to pursue?

Performance of public procurement systems is frequently used to measure the integrity of governments in power (Mamiro, 2012). Since there is no established metric to resolve these issues, successful procurement reform may be dependent on which values and goals are pursued by procurement professionals. Under this condition, public sector procurement professionals are instrumental in any reform effort that requires government intervention into the marketplace. In fact, procurement professionals may be struggling to balance the inherent tensions between what is directly in front of them with what they perceive as the right direction to follow.

Ultimately it depends on the choices made by procurement professionals between what they perceive are the right choices and what is defined by others as the right choices, ex post. In fact, when confronted with choices, the procurement professional may in fact rely on the preverbal “stick” to guide them – in many cases the “stick” are the rules and processes that limit discretion. It is through the procurement professionals’ lens that we delineate the nature of dilemmas that they face, and how these dilemmas manifest stasis over reform.

Organizations of all sizes, industrial sectors, market share, and cultures constantly face dilemmas such as differentiation/integration, autonomy/interdependence, low cost/value, economies of scale/product variety, scale/flexibility, flexibility/controllability, and change/continuity. In the public sector however, some of these dilemmas may not be as common. According to Norman (2003), various reform efforts over the last 20 years in the public sector have witnessed an increasing need for accountability, efficiency, effectiveness, all-the-while balancing the inherent tensions that these reforms have caused. Although Norman was generally talking about the dilemmas faced by political and administrative actors, he does highlight the manifestation of these dilemmas at the operational level. Moreover, given the complexity of these dilemmas, it is likely that procurement professionals will be continually called upon to balance these inherent tensions with little direct guidance from policymakers or elected officials attempting to reform government.

THE CONTEXT: PRIVATIZATION OF PUBLIC SERVICES

It might be trite to suggest, but over the last half century privatization¹ has been a growing mantra in governance. In fact, a number of governments have shifted some or all components of their service delivery systems and sub-systems to the private sector in hopes of lowering costs and achieving higher performance outcomes for their tax payers. As a result, many contend that government's role in society is evolving from a service provider to that of a broker of services (Goldsmith & Eggers, 2004). In fact, recent scholarship has shown that for a number of traditional government services the private sector can do it cheaper, faster, and produce higher quality services.

This begs the question why can the private sector do it cheaper, faster, and deliver quality? As Adam Smith (1776) noted over two centuries ago, the profit motive is the primary driver as to why the private sector can out-perform the public sector. After all, Niskanen, (1971) suggested, bureaucrats (government officials) are budget maximizers, where success is judged not based on the quality of services provided, but on the size of their respective budgets. While some contend that the monopoly powers of government necessitate inefficiencies, since there is no competition by which to drive down prices and increase quality, others maintain that by their very nature democratic governments are inefficient, since elected officials can never agree on what constitutes the public interest.

Apparent in all of this discussion is that the metric by which we judge success is singular, profit. Economists have long asserted that firms are motivated to increase profits to the point where marginal costs equal marginal revenues, and facing competitors in the marketplace, firms are forced to reduce costs and increase quality to differentiate themselves from their competitors. If they fail to attract customers through lower prices and higher quality they will eventually go out of business. In fact, Tiebout (1956) suggested that local governments do face competition in terms of voters voting with their feet. That is, if a particular government did not offer the right mix of goods and services, taxpayers will move to jurisdictions that do provide those goods and services. Eventually those governments would go out of business if they did not satisfy taxpayer's demands.

Based on these views, how we measure the success of government service delivery is through the lens of price, speed, and quality. Yet we know differently. Government is not all about these measures, but instead must curvy to other values that are not easily operationalized in terms of price, speed and quality. This can be witnessed by looking specifically at one of the main functions within both private and public organizations, that is how they acquire the goods and services that drive their organizational decision-making, and thus our five dilemmas.

As a first approach to confirm that practitioners face these dilemmas in practice, the method taken herein is based on two processes. The first gathers and explicates the relevant extant literature from public administration over the last several decades to sketch the contours of both theory and practice of these dilemmas in

public procurement. There is currently an inadequate discussion in the scientific literature concerning these dilemmas that public procurement professionals face that is in need of attention. In turn, this has led to little generation of substantive theory applicable to public procurement that can help drive the field in terms of dealing with often conflicting values and goals in the procurement process – often because the frameworks by which research has approached public procurement has not addressed these dilemmas sufficiently.

A second approach taken in the paper is a systematic process of confirming that the dilemmas exist in the field by using experts that can either confirm or refute that the dilemmas exist to show that they are not simply artifacts of the literature or personal biases of the researchers. Confirmation is an essential step for developing such dilemmas and helps reduce framing bias (Judd, Smith and Kidder, 1991). Five current public procurement practitioners were selected to validate if these dilemmas are realities in practice, and if so how they are typically addressed. The process for selecting the thought leaders (experts) in public procurement was based on standards established by the Delphi technique. The Delphi technique is typically used to identify alternatives, explore or expose underlying assumptions, and relate expert judgments on topics spanning a wide range of practical or theoretical issues within their knowledge domain. Consistent with the Delphi technique, experts were identified by examining the National Institute of Governmental Purchasing's key award winners over the last several years. We examined the NIGP website (which is recognized as the foremost authority on public procurement) to identify five key recipients of the various service awards the NIGP offers. Then the group was vetted by looking at whether they had achieved a prominent position within a national or international professional association (an indicator of leadership); have achieved national recognition as thought leaders (recognition by others as experts in the field); and have more than 20 years of experience in public procurement (an operationalization of domain-specific knowledge). Five individuals were identified as fulfilling these criteria, and from that list were sent an email asking if they would be willing and able to participate. All five indicated their willingness to participate in the process, and the results are reported in the discussion section of this paper.

The following is a discussion of each of the key areas developed along with the related dilemmas that could be used to help improve both research onto public procurement and the practice of public procurement.

Public Procurement Dilemma #1 – The Accountability/Responsibility Dilemma: Develop Flexible Procurement Systems While Maintaining Accountability and Control

Many contend that purchasing is distinctively different between the public sector and private sector (Hood, 1995; Rainey, Pandey, & Bozeman, 1995; Alford, 2002; Boyne, 2002; Johnson, Leenders, & McCue, 2003), as well as between the public sector and non-profit sector (Salamon & Anheier, 1998). Although Muller (1991) found several similarities in public and private sector purchasing responsibilities, other researchers have identified numerous features that differentiate the private and public sectors such as the nature of the inter-organizational network and the public service provided (Johnson, Leenders & McCue, 2003), the nature of the supply market and availability of private sector alternatives, but perhaps most importantly, the nature of accountability and regulation (Harland, Gibbs & Sutton 2000). Through principles of transparency and accountability, the regulation of public procurement provides a pedestal of the legal, economic, and policy interface between the public and private sectors (Bovis, 2008). For the present purposes, a focus will be on the differences emanating from the accountability and control functions utilized within public purchasing while ensuring the need for fairness and transparency.

There are noticeable differences between public and private purchasing. Consider that because public procurement professionals often provide advice during the preparation of purchase descriptions and statements of requirement, evaluating and negotiating contracts must be done in a way that any resulting contracts adequately protect the interests of the government agency and the public in general. Thus public procurement is typically characterized by high levels of public disclosure and a heavy reliance on the bid process compared to private sector organizations (Osborne & Pastrik, 1997). It is well-known that private and public sector organizations respond differently to scarcity of resources. Where the private sector tends to see increased competition (Harrigan, 1980), public sector organizations tend to react to cutbacks by increasing centralization to avoid

duplication (Ludwig, 1993). This often results in the increased use of purchasing consortia (Johnson, 1999).

However, due to statutory regulations and public oversight, public procurement must be transparent in a way unrivaled by private entities. As a result of open and public surveillance (Vagstad, 1995), public agencies tend to be cautious and risk-adverse while responding to procedures and policies that outline how to avoid risk or the perception of misappropriation (McCue, 2000). Even among transparent public procurement, the interface of public and private sectors creates incentives for corruption (Coppier & Piga, 2007). Efforts to curb corruption through increased levels of transparency often confront high implementation costs. If transparency is costly, organizations have a tendency to stop short of implementing the level of transparency in procurement that would dissolve corruption. Consequently, Coppier and Piga (2007) argued transparency alone is not enough to reduce corruption levels.

While transparency may foster risk-averse tendencies, a higher level of transparency does not automatically evidence improved performance by purchasing agents (Humphreys & Weinstein, 2007). Since it is typically government administrators or elected officials rather than agency end-users who must answer to public criticism over perceptions of bureaucratic waste or budgetary mismanagement, end-users are usually not as appreciative of oversight nor are they as aware of the need for the steps taken to minimize the potential for fraud and abuse. Moreover, because service departments are often reactionary instead of proactive in solving societal problems, a tension between line agencies and the procurement organization tends to develop over time. Thus, centralized procurement departments are often seen as roadblocks to effective service delivery by both elected officials and agency end-users.

Nonetheless, purchasing agencies must continue to exercise a control function through strict adherence to legal, professional, and administrative requirements that define the purchasing process (McCue & Pitzer, 2000). Since one of the main factors in accountability is the control of discretion and the ability to fix responsibility, it is easy to see a tension develop in complying with the structure and policies that attempt to limit flexibility (Aberbach & Rockman, 1988). This need to respond to conflicting values and to

deal with unforeseen problems requires, in many cases, an adaptable process willing to accept risk through experimentation. Thus, although no single central purchasing authority can fully control the behavior of subordinate units (NIGP 1989; NASPO 1997; Appleby, 1947), a centralized purchasing system inevitably results in conflicts between the central purchasing department and the line departments it is established to serve.

In fact, Downs (1967) pointedly alluded to the evasion of control that is almost a natural response to the attempts of top-level officials to control the behavior of service managers and subordinates. Labeling these reactions laws, he found that the “law of counter control” suggests that the more the effort by top administrators to control subordinates, the greater the effort to evade the control. What is more, if we couple his “law of imperfect and diminishing control” with his “law of control duplication,” we can conclude that bureaucracies tend to multiply while increasingly mitigating the purpose for which they were created. Consider that since larger organizations generally have weaker control by the top, the attempts to control large organizations tend to generate other organizations to oversee the attempted control. Thus, many contend that purchasing authority, especially in government, must be decentralized in order to provide more responsive support to end-users, eliminate bureaucratic obstacles to program accomplishment, improve inter-departmental coordination, and empower service delivery managers to procure what they need without impediments created by a centralized organization (Osborne & Gaebler, 1992; Osborne & Plastrik, 1997; MacManus, 1992; Gore, 1993; McCue, 2001).

These issues highlight the public procurement tradeoff which center around the tension between economic efficiency in the procurement of public goods and services and the public’s need to maintain control against fraud and mismanagement (Schwartz, 2010). This requires a delicate balance that at the least is difficult to achieve if not illusory. Procurement systems across the U.S. have established control systems and accountability standards that attempt to balance these inherent tensions between efficiency and oversight in the procurement process. For example, Picci (2007) proposed a reputation-based governance model to allow for the routine production of statistics that are useful for monitoring purposes and also provide a framework to limit rent-seeking and

corruption. But there is no objective standard to judge the juncture at which rules become too burdensome to control against the potential for fraud, nor is there a benchmark threshold to determine the point where the risk for fraud is too high. Thus judgment of the “correct” balance between efficiency and oversight in procurement is based on a political assessment (Key, 1940).

From the perspective of the five participants in the Delphi study, the relationship between efficiency and oversight is ambiguous. As one expert responded, “The issue that we have to face, however, is that the more decentralized an operation becomes, the less likely that a procurement professional will be handling the procurement process. Operational staff who do not have proper training in procurement will likely be exercising procurement decisions that may have negative consequences for the organization, whether from an economic or accountability perspective.” Another expert stated:

Yes, I believe there is a tradeoff and much of it comes down to risk mitigation. By this, I mean that we can decentralize our procurement authority downward (for example, we give departments the autonomy to purchase up to \$25K), but we are still assuming the risk. During a procurement and contract audit, the issues will come back to the procurement authority, regardless of who actually did it. If departments are abusing small dollar limits or showing favoritism to certain suppliers, then it will be central procurement that failed to adequately train or provide oversight. So decentralizing may make sense, but there are some tradeoffs in the way of increased risks.

In all, there are always going to be tradeoffs between decentralizing and empowering line managers in order to provide more flexible procurement processes and the need to control how line managers spend public resources. Although electronic procurement systems may help in providing more flexibility to line managers in the purchase of goods and services, ultimately the central purchasing authority will be held accountable if things go wrong.

Public Procurement Dilemma #2 – The Fraud/Red Tape Dilemma: Limit the Opportunity for Fraud/Mismanagement While Reducing Operational Constraints

One might be tempted to adopt a risk-management perspective to this problem, yet it is unclear how an observer would gauge the competing values of economic efficiency (often measured in monetary terms) against the value of public transparency and accountability, because it is not readily apparent how this latter value should be measured.² Nonetheless, we are confident that the attempts to institutionalize internal control processes in purchasing often have the unintended consequence of mitigating attempts by service delivery managers to effectuate added-value in the organizational supply chain. Moreover, it is plausible that additional regulations result in goal displacement where efforts of purchasers are redirected toward proxy measurements and evaluations. Under these circumstances, the focus of purchasers would likely shift to reporting and offering a detailed accounting of their activities that is more reactionary rather than proactive, and more clerical than strategic. Indeed, in the long-run, this may actually inhibit accountability in the procurement function by shifting the efforts of public purchasers to properly filling out forms which are viewed by others. In turn, this may absolve the purchaser of responsibilities for procurement mistakes, miscalculations, or poor decisions because the forms were properly filled out while the standard operating procedures were followed.³

Indeed, this is but one reason why over time, organizations tend to become sclerotic and rule-driven, and this concern has been at the forefront of the reinventing government movement (Osborne & Gaebler, 1992; Rauch, 1999). It has been noted by Downs (1967) that not only do all organizations tend to become more conservative as they become older, but the quantity and detail of paperwork tends to increase steadily over time, regardless of the amount or nature of the activity. But we are still left with a public procurement dilemma. Consider the implications of this for centralized procurement versus devolved purchasing authority. A hierarchical purchasing apparatus has reporting requirements that are one-step while devolution is likely to have duplicative paperwork requirements due to intradepartmental and interdepartmental controls. In other words, a one-stop shop will provide uni-stage auditing while there will be at least two stages of

auditing under a more decentralized system. Since under devolution there would be the auditing of both the agency and the purchasing department which is likely to hold a copy of the agency records, great cost savings are not necessitated if there is any level of control granted to the procurement agency.

Thus, it is no easy task to delineate the proper procedures that will balance the efficiency-oversight tradeoff – or what we term the fraud-red tape dilemma. To address the fraud-red tape dilemma, consideration must be given to establishing training and education of not only procurement personnel but elected officials, administrators, suppliers, and line services personnel as well. Furthermore, this training will likely have elements of not only proprietary rules and regulations, but also enhanced ethics education as well. This is likely to lead to increasing costs in training and personnel hires for those purchasers who are becoming more specialized. All the while, there is a need to establish monitoring and evaluation systems to insure accountability is maintained and that the controls on the factors of production are not overly burdensome.

In addition to the concerns just laid out within this public procurement dilemma, discretion is a major problem and a balance between service delivery managers' requests to loosen regulations (red tape) must be struck against the need of organizations to operate according to standard operating procedures to reduce the opportunity for fraud (McCue, Buffington, & Howell, 2003). Yet due to significant efforts to streamline and centralize roles, missions, and budgets, not surprisingly, the multitude of agencies makes assessing costs for locating the purchasing function in decentralized organizations extremely difficult (Walker & Poppo, 1991). Consider that funding for those charged with making purchases and procuring goods and services would now be included in agency budget accounts that provide funding for other activities. When coupled with the evolving uncertainties surrounding the communication and procedural architecture associated with increasingly decentralized purchasing, the ability to hold line-employees accountable by those charged with oversight may be diminished because optimal allocations of resources should be based on the informed expectations of strategic outcomes (for example, see Arrow, 1962). Thus there are difficulties in gauging the consequences of decentralizing the purchasing function. In fact, devolution can lead to

less transparency and make it more difficult in identifying trade-offs between purchasing and other goals of the agency (Tanzi, 2001).

From the perspective of the experts in the Delphi study, there is consensus that “although creating proper checks and balances and eliminating close loop situations can be done efficiently without jeopardizing process times so long as these check points are assigned to the proper personnel and there are established thresholds in place.” Moreover, “the bottom line is that there is a significant tradeoff between red tape and minimizing fraud and/or mismanagement,” and that these tradeoffs require that “there is a balance, for sure, but when we increase fraud prevention we need to understand the tradeoff is more bureaucracy involved.”

The issue of public trust, and those charged with the responsibility for the discharge of the public weal, will limit purchasing’s ability to devolve authority while insuring against corruption. The fraud – red tape dilemma is one that is often not discussed in the literature, yet is critical to how governments are constrained when attempting to empower service delivery managers yet simultaneously maintain accountability structures that accurately reflect public values. It is how and by whom those values are interpreted and applied that purchasing is constantly struggling with maintaining a balanced set of operational policies and procedures that satisfy both objectives.

Public Purchasing Dilemma #3 – The Principle/Agent Dilemma: Identifying “Best Value” in the Presence of Competing Goals and Common Agency

Because price, cost, quality, and value lead to discretion in procurement decisions, the means by which accountability may be attained when that discretion is exercised becomes more difficult. Consider that a principal-agent relationship in procurement involves a fiduciary relationship which arises because of the asymmetric knowledge and superior training of the purchasing-agent (Soudry, 2007). This means that the agent in charge of purchasing has the trust and confidence to act in the capacity of a “caretaker” of another’s rights, assets and/or wellbeing. However, the purchasing agent cannot be given the full freedom to set the sum of requirements for the award of a public contract (Hettne, 2013). Instead, it implies that the agent-purchaser has a moral, personal,

and legal responsibility to ensure that the funds are expended responsibly, reasonably, and in compliance with the intentions, rules, laws, and concerns of the provider of the funds.

However, throughout the procurement process, there are inevitable opportunities to shirk these responsibilities to act in a fiducial capacity, often because of the presence of moral hazard which is the incentive to act in a way detrimental to one party after an agreement has been made (Baron & Besanko, 1987). Obviously in this case, this occurs due to the personal gains to be derived from such action. As such, there is a conflict of interest which describes the potential or real clash between what is beneficial to the agent in terms of adopting best practices and what is beneficial to the principal in terms of best value as operationalized through better prices, better quality, and quicker delivery. To offer guidance on these matters, codes of ethics are developed to regulate public procurement and typically apply to all expenditures. They often include internal policies and statutes that describe the appropriate conduct for all public employees, but sometimes even when faithfully following these codes of conduct, the “best” value option may not be entirely apparent or clear because of competing goals and competing principals – the third dilemma.

Because actors within the process can be simultaneously modeled as the principal to some while considered the agent of others (Sappington 1991, 63), there are problems which to date appear to be unrecognized in the literature on public procurement and which emanate from this public procurement dilemma, and it concerns the issues of common agency and rivalry. Common agency refers to the situation when one agent simultaneously represents multiple principals (Grossman & Helpman, 1997). Common agency has been categorized at least two ways. The first is one of delegation when several parties voluntarily agree to have one agent. The second is referred to as intrinsic common agency whereby a single agent is “naturally” endowed with the right to make binding decisions affecting the principals (for a fuller explication, see Bernheim & Whinston, 1986). Depending on the enabling legislation, procurement procedures, and the location of the purchasing function, there may be multiple and conflicting principals utilizing a common purchasing agent, or there may be multiple purchasing agents each representing a single principal in conflict with other principals.

Additionally, inherent political tensions tend to pull public procurement agendas in different directions (Schwartz, 2010). When this happens, issues of public control and accountability emerge, especially when government agencies are pursuing multiple missions and there is a fuzziness surrounding public objectives (Dewatripont, Jewitt, & Tirole, 1999), which in turn makes the identification of best value extremely difficult, if not impossible.

Hence, it is easy to see how under conditions of scarce public resources (which appears to be a constant situation), competition for public resources can lead to purchases by one agent that may contradict or counteract the purchases of another (Rolfstam, 2009). Under these circumstances, it is unclear how the ultimate principal (which is regarded as society) can maintain control over the agent ostensibly acting on its behalf. Indeed, there are several principals who may be operating under competing goals and jurisdictional rivalries (Strauss, 1964). Moreover, because procurement authority creates fiduciary responsibilities to fulfill obligations and avoid certain actions, decision-makers are theoretically held accountable for those decisions, and it is believed that accountability is realized through the transparency of actions taken within a formal network of internal and external controls.⁴ As a result there are competing incentives to achieve best practices in light of the potential common agency constraint.

As the experts from the Delphi study noted that the major problem is reaching a balance between determining what exactly best value is and how best value is used to select suppliers. For example, one expert noted:

I believe this to be a long standing issue in the public sector. Every stakeholder in an acquisition has a different idea of best value. The accountants will say cost, project managers want large contractors (higher price), and the end user wants functionality for their business needs (they don't care about other stuff). Therefore, it is imperative that the procurement professional broker a compromise in the way of an RFP evaluation committee and agreed upon criteria. Nobody gets their way entirely, but can have input into the best value determination. The "easy out" is to look at lowest responsive bid (hard to argue with who is lowest), but the problem is that [this] is outdated thinking that does not serve the government well.

The complexity of defining “best value,” coupled with the competing demands that are placed on the purchasing function, will require purchasing to “broker” compromises between stakeholders on just what is best value. Although we might all agree that best value can be operationalized in terms of efficiency, effectiveness, economy, and in some cases the need to meet the social equity goals as articulated in law, it would be extremely difficult to agree on how these dimensions are to be weighted. Moreover, even if we could agree on a particular weighting scale, how we measure those artifacts is problematic.

Public Procurement Dilemma #4 – Short-Term Benefit/Long-Term Cost Dilemma: Short-Term Economic Efficiency vs. Long-Term Monitoring Costs

Internal controls are the protocols that ensure effective and efficient operations (Cox, 2008), and they are typically maintained through reliable financial reporting; compliance with applicable statutes; and adherence to administrative directives, rules, policies, and procedures (Schiele & McCue, 2010). Moreover, the control environment is assumed to be very important. This consists of the administrative assumptions, standards, values, and norms (see Schein, 1992 for an introduction to organizational culture) that promote appropriate purchases that have a clear public purpose.

In theory, the environment helps to guide members of an organization and their behaviors (Palmer, 2005) while ensuring that funds are expended responsibly and in compliance with the intentions, rules, laws, and concerns of the provider of the funds. By setting the organizational culture of their departments, administrators help to control purchases through their own actions and directives (Preuss, 2009).

There are numerous control activities which are often assumed to increase accountability. For example, those staff given purchasing authority – whether they are procurement or line-agency personnel – should be intimately familiar with the control environment and thus have adequate training about the institution’s policies and procedures. Moreover, control can also be employed through the use of pre-approvals and auditing. Prior to making some purchasing transactions, reviews which typically require supporting documentation of the proposed purchases can be conducted to

determine that the purchases are appropriate. In general, higher dollar purchases and those that carry more risks than usual are more likely to require pre-approval, yet similar to a pre-audit, pre-approvals are often burdensome and slow down the purchasing process, especially if several layers of pre-approval are required (Ellram, 1995).

At key stages in a contract selection or negotiation process, probity audits may offer control measures in real time. Probity audits offer independent reviews of government procurements and expressions of interest to ascertain whether procedures followed are consistent with appropriate regulations and principles of transparency (Ng & Ryan, 2001). Such audits are typically employed in relation to high-value, high-risk transactions. The growth in probity audits reflects the argument that public sector managers are more attuned to stakeholder expectations and more adept at developing risk management strategies (Shead, 2001).

An additional level of control can be done by utilizing post-transaction reviews (Tadelis, 2012). This means that although departments may require pre-approval within their own units yet are not subject to pre-approval at the central level, a request for information is sent to the agency responsible for the transaction. Upon receipt of the explanation for the transaction, the central procurement office evaluates the purchase to determine if they have violated applicable policy and procedures. This is similar to a post-audit. Evidence has suggested either pre-approval or post-audit procedures in a traditional top-down monitoring system plays an important role to reduce missing funds and corruption (Olken, 2007).

All of these control activities are impacted by administrative risk assessments. It is perhaps no secret that administrators engage in control activities in order to reduce activities that might jeopardize the agency's ability to meet its commitments. In terms of purchasing functions, controls are maintained to reduce risks which are uncertainties "about whether potentially significant and/or disappointing outcomes of decisions will be realized" (Sitkin & Pablo, 1992, p. 10). However in trying to close the gap between agency outcomes and expectations through monitoring and purchasing controls, more bureaucracy is required which can lead to reduced productivity, increased complexity, and a reduction in marginal value-additivity. On the other hand, allowing excessive purchasing risks

may lead to a loss of assets, economic inefficiency due to poor business decisions, increased instances of non-compliance, and loss of public confidence. Again, the public procurement dilemma surfaces with no clear answer which establishes the proper balance between the level of control that is needed with the level of risk that is present (Schapper, Malta, & Gilbert, 2006).

Because any conceptualization of risk should account for the tradeoffs between expected economic and political returns from changing the location of the purchasing function compared to those costs of maintaining the status quo, a clear definition of success is required. Yet this definition is illusive for two reasons (Schapper, Malta, & Gilbert, 2006). First, there are numerous competing goals that have an unknown distribution of benefits, so defining costs and benefits in an environment rife with common agency requires identifying individual, organizational, and societal winners and losers. Second, organizational dynamics associated with changes such as these have an unknown *a priori* economic impact, because it is currently unclear whether any proposed reforms of purchasing protocols, especially those that encourage the redistribution of responsibility and authority across jurisdictions and agencies, are likely to make individual purchasers more risk-seeking or risk-averse. These parameters impact both the long and short-term costs of public procurement.

The tradeoff between short-term economic efficiency and long-term monitoring costs was a key issue discussed by the experts in the Delphi study. For example, one expert noted:

Certainly there is a tradeoff here. On an immediate, short term basis, we can cut departments loose with their spending. No central oversight or approvals and they consider their procurement efforts to be efficient and nimble. However, the big picture is that these efforts will be monitored or audited in the future and require some attention. So, raising a p-card threshold to \$5K will make your departments happy and they are off and running! But the likely result is increased maverick spend, contract pricing that is missed out on (we pay more), fragmentation through order splitting, potential ethical violations with favored vendors (or family), and purchase of unapproved items (or personal items). I have seen all of these

happen and the long term "clean up" costs are significant, as is the political fallout and damage to our reputation.

When service delivery managers are empowered with more purchasing authority there is a corollary increase in monitoring costs. In turn monitoring costs require additional resources expended on procurement, either in terms of personnel with the appropriate monitoring skills or through technology that is capable of insuring compliance. In either case the additional costs associated with monitoring increases since there is no true incentive for the service delivery managers to act in the best interests of the procurement department.

Public Procurement Dilemma #5 – The Cost of Empowerment Dilemma: Responsiveness to “End User” through Decentralization while Increasing Training and Evaluation Costs

If one considers that decentralizing the purchasing function is equivalent to a functional reorganization, the presumed savings may not be realized. Indeed, the scholarly literature on the savings to be enjoyed from major governmental reorganizations or terminations of agencies should give reformers pause. Consider that Carpenter and Lewis (2004) found that at least at the federal government level, although termination of agencies happens frequently, those commitments the agencies executed are rarely discarded. Thus, termination of organizations may actually increase costs in both the short and the long-run because of efficiency losses associated with fragmentation of functionally-related activities into different agencies (Carpenter & Lewis, (2004). There are also numerous other empirical and qualitative studies that point in the same direction, especially contributing to higher costs in the short-run (Frantz, 1997; Meier, 1980; Salamon, 1981; Szanton, 1981; Behn, 1978).

Now one might make the argument that decentralizing the purchasing function is not comparable to a major reorganization, but we would differ on the grounds that devolution may violate classical organization theory which holds that agencies with no duplication and limited spans of control can result in the provision of services with fewer persons and at less cost (Downs, 1967). Indeed, the training that is required for decentralized purchasing is likely to be substantial and require new job skills for line employees. For these and other reasons, we reserve judgment that devolution will reduce costs. In

fact, it is just as likely that the total administrative expenses devoted to procurement will in fact increase while those expenses will be redistributed across more agencies. In time, one can expect that lapses in procurement protocols will incrementally lead to more rules and regulations designed to control these mistakes which will then lead to increasing overall costs and calls for centralization in the chase for more accountability. Ultimately, this can lead to loss of efficiency in the name of increased accountability – another public procurement dilemma. This dilemma might also help explain some of the cycles and swings from centralization to decentralization and back again that are often witnessed in public procurement organizations. Rule-making explodes under devolution in order to control fraud or waste which in turn, leads to calls for more efficiency via centralization of purchasing. However, this centralization can lead to less procurement responsiveness and end-user effectiveness because the discretion of end-user agency is curbed – all in the name of accountability.

Lember, Kattel, and Kalvet (2014) concluded there is no single dominant approach to public procurement and innovation that governments follow. Implementation remains cautious and indirect rather than substantial and direct. The very process of public procurement, regardless of its position in the cyclical continuum, plays a far more modest role in the actual implementation than expected (Lember, Kattel, & Kalvet, 2014)

Because expectations of returns are intimately linked with the distribution of potential outcomes, a culture of taking risks and the uncertainty that it sires can be traced to organizational norms and actors' perceptions of situational risks (Bozeman & Kingsley, 1998; Sitkin & Pablo, 1992). Thus bureaucratic cues from the top become important in outlining the potential for risk-taking by purchasers. Consequently, if one is more concerned with maintaining control and reducing the aforementioned risks, this argument implies that oversight can be done better through centralized purchasing, and the trend toward more devolution in purchasing may be fraught with indeterminate risks.

Of course, there are many examples in both the scholarly literature and daily newspapers of corruption or the impact of “special interests” on elected officials too numerous to mention here, yet they underscore the role that a professionalized procurement department

might have played in lending expertise in negotiating contracts that might have better served the community while saving a lot of money. Indeed, it appears that as devolution continues and outsourcing expands, the likelihood that the public will witness similar examples in the future will probably continue to grow. Thus another purchasing dilemma unfolds, namely that as outsourcing and thus short-run efficiency increases, the opportunities for corruption and fraud also expand. Over time, rules will be put in place that attempt to control opportunism – all the while burdening procurement processes with more bureaucratic detail that diminishes efficiency in the long-run.

Perhaps this all points out that in many respects, it is often as important for bureaucrats to be as politically efficient as economically efficient. However, in order to accomplish this, bureaucrats need to be alienated from the resources under their control, something which current reform efforts and purchasing trends do not improve. As a consequence, aligning the functions and incentives of various agencies and levels of government is extremely difficult in such a complex environment (McCue & Gianakis, 2001).

What is obvious is that public purchasing is accomplished within a manifestly political environment via both formal political leadership contingencies and through the negotiation of informal power dynamics (Fisher, 2013). Consequently both economic and political risk assessments should be conducted to examine proposed alternative solutions to the public procurement dilemmas outlined herein so that a systematic comparison and evaluation of alternatives available to policy-makers can be obtained. The power of purchase must capture a paradigmatic shift from ‘doing things better’ to ‘doing better things’ (Fisher, 2013). As a result, both economic and political risks must be priced into any proposal for government reforms and organizational architecture. Because any conceptualization of successful reform should account for the tradeoffs between expected economic and political returns from changing the location of the purchasing function and the rules under which practitioners operate, a clear definition of success is required – something which is lacking in the literature because of the ambiguous nature of the dilemmas they face.

Although common metrics are dollar-savings, little attention is paid to the prices associated with loss of public confidence and accountability. It has been persuasively argued in economics that a

well-designed contract may have unspecified and vague obligations, especially when some aspects of performance are unverifiable (Bernheim & Whinston, 1998). For this reason, subjective performance is still the norm in politics as it is in many private firms (Gibbons, 1998; Aggarwal & Samwick, 1999; Prendergast, 1999). Yet any future proposed courses of action in purchasing should resolve the tradeoffs in a rational way, and the identification of these procurement dilemmas help in that calculus.

Once again, the experts confirm that this fifth dilemma exists in practice. For example as one expert noted, “there will likely be a short term spike in training and evaluation costs, which should stabilize after some time, however, I believe that if a system becomes too decentralized that the lack of consistency between different operations will likely create a total breakdown in the procurement system. That’s why I still believe that there must be some form of centralization within an organization.” Another expert stated “procurement left in the hands of the end user without proper and frequent training will result in higher cost overall. The end user is mission driven and has less concerned in regards to procurement policies and regulations.”

Since procurement in any organization is central to various core objectives, it is basically impossible to align all of them together under multiple demands. Since each department is motivated by different immediate objectives, there remains the search for proper incentives to align procurement goals and department objectives. Moreover, unless there is a centralized process to aggregate purchases, there are potential significant economies of scale losses since individual departments will be inclined to purchase what they “need” irrespective of the associated efficiency losses.

CONCLUSION

Within public procurement, procurement professionals are constantly grappling with at least five public procurement dilemmas that are summarized in Table 1 below and include 1) balancing the perceived need for accountability and control while ensuring fairness and transparency; 2) devolving purchasing responsibility while maintaining accountability and control; 3) identifying a “best” fiducial acquisition decision in the presence of competing goals and common agency; 4) gains from short-term economic efficiency versus the long-

term costs to monitor and control against fraud and mismanagement; and 5) elevated responsiveness to end-users through coordinated decentralized organizational arrangements that can empower service delivery managers while increasing training, monitoring, and evaluation costs.

Although RAND developed the Delphi method in the 1950s to forecast elements of warfare, it has since been adapted in many ways. The original method entailed a group of experts who anonymously reply to questionnaires and subsequently receive feedback, after which the process repeats itself.⁵ The goal was to reduce the range of responses and arrive at something closer to expert consensus. The use of the Delphi Technique for current purposes attempts to assess the literature findings based on informed intuitive judgments of some of the most prominent practitioners in the field of public procurement. Based on the second round of expert feedback, a concurrence of opinion was exhibited in the second and final round of the Delphi data collection which is reported in Table 1.

Thus there is little doubt that procurement systems in governments face competing demands and dilemmas that may be unresolvable. As a framework to the public procurement dilemmas outlined here, procurement within the public and private sectors are confronted with significantly different objectives, especially in the area of common agency accountability and a regulatory environment that is designed to be openly transparent to all.

It has been argued that within the principal-agent problem and resultant delegations, procurement must create incentives for the agent to act in the best interest of the principal – all of which is fraught with moral hazard and conflicts of interest in the public sector. That is why codes of ethics, internal policies, and statutes assist in providing some guidelines. Nonetheless, many government purchasing professionals are being challenged to develop new flexible structures and operational processes, but it is difficult to see how this new flexibility will result in substantive long-term resolutions to these dilemmas. The balancing tradeoff between economic efficiency coupled with efforts to maintain control against fraud and mismanagement is at least difficult, if not illusory.

TABLE 1
Expert Convergence Results from Delphi Technique

Dilemma	Purpose	Expert Convergence Results
Flexible Procurement Vs. Accountability and Control	Balance Centralized-Decentralized Procurement	Decentralized flexibility requires sufficient end-user education and training to mitigate risks to process consistency/integrity and procurement agency reputation
Fraud Opportunities Vs. Operational Red-Tape	Balance the Efficiency-Oversight Tradeoff	Reduced fraud opportunities via technological transparency often requires additional FTE support and additional flow-through check points in procurement process
Best Value Vs. Competing Goals	Common Agency Balance	Vending community responses often entail conflicts with competing “best value” operationalization throughout numerous stakeholders
Short-Term Economic Efficiency Vs. Long-Term Monitoring Costs	Balance Levels of Control With Levels of Risk	Initial investment costs that spike then taper can reduce long-term monitoring costs but failure can lead to significant “clean-up” costs that can be politically and reputationally injurious
Responsiveness to End User Vs. Increasing Training and Evaluation Costs	Demonstrate Both Political and Economic Efficiency	Process decentralization empowers end-users but education and training costs escalate and must be maintained which may result in procurement FTE substitution (trainers replace procurement analysts)

We also found that nearly by definition, efficiency must be sacrificed in the face of efforts at control through the use of standard operating procedures that catalyze routine organizational actions to guard against misguided actions. As a result, pre- and post-approvals often become burdensome by slowing down the purchasing process which likely mitigate added value efforts by purchasers. In turn, reform efforts that do not address these underlying issues will only be successful if the public procurement professional chooses the right course and the metrics by which success is measured and that reflect broader social values.

Although there are many calls for governments to operate more like a business, the existence of the public procurement dilemmas outlined herein strongly suggest that at least in this area, it would be doubtful that public procurement operations and standards can be reverse engineered from experiences in the private sector. We have identified several joint properties of an inherent tension between inputs, outputs, and the factors of producing procurement and acquisition decisions in the public space. While this tension may give politicians political cover from being held accountable for ambiguous directives, it actually may create unintended yet costly problems for procurement practitioners. In sum, with such inherent tensions and no as-yet identified objective standard that can judge the right balance to strike in resolving these dilemmas, a prescriptive panacea remains elusive at this point. However, it is hoped that this article helps outline the nature of some of these problems in a way that can benefit future research in this important policy area.

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NOTES

1. Generally privatization has been variously labeled competitive sourcing, outsourcing, contracting out, and more recently public-private partnerships.
2. It might be argued that even when money is not the medium, the compensation principle allows that if there is connexity, people can indicate how much money they would require to compensate them for the loss attributed to the exchange. However, the lack of a common metric of transparency and accountability may mitigate the connexity requirement. For a beginning discussion, see Kaldor (1939) and Bailey (1954).
3. For a discussion of the linkage between accountability and protection, see Crozier (1964, pp. 213-220).

4. The terms used in the current discussion on accountability rely heavily on the following resource: "Welcome to Purchasing Guide Chapter 5 Accountability" from the Unit Administrator Guide at the University of Oregon, Eugene, OR. Accessed 7-31-04 from <http://baowww.uoregon.edu/eGuide/Procurement/procch5frame.htm>
5. See Dalkey, Brown, and Cochran (1969) for an in-depth explanation of the Dephi Technique and its applications.

REFERENCES

- Aberbach, J. D., & Rockman, B. A. (1988). "Mandates or Mandarins? Control and Discretion in the Modern Administrative State." *Public Administration Review*, 48(2): 606-612.
- Alford, J. (2002). "Defining the Client in the Public Sector: A Social-Exchange Perspective." *Public Administration Review*, 62(3): 337-346.
- Appleby, P. H. (1947). "Toward Better Public Administration." *Public Administration Review*, 7(2): 93-99.
- Arrow, K. (1962). "Economic Welfare and the Allocation of Resources for Invention." In Universities-National Bureau (Ed.), *The Rate and Direction of Inventive Activity: Economic and Social Factors* (pp. 609-626). Princeton, NJ: Princeton University Press.
- Baron, D. P., & Besanko, D. (1987). "Monitoring, Moral Hazard, Asymmetric Information, and Risk Sharing in Procurement Contracting." *The RAND Journal of Economics*, 18(4): 509-532.
- Benner, T., Reinicke, W. H., & Witte, J. M. (2004). "Multisectoral Networks in Global Governance: Towards a Pluralistic System of Accountability." *Government and Opposition*, 39(2): 191-210.
- Blair, H. (2000). "Participation and Accountability at the Periphery: Democratic Local Governance in Six Countries." *World Development*, 28(1): 21-39.
- Boyne, G. A. (2002). "Public and Private Management: What's the Difference?" *Journal of Management Studies*, 39(1): 97-122.
- Bovis, C. (2008). "The Effects of the Principles of Transparency and Accountability on Public Procurement and Public Private

- Partnerships Regulation.” *European Procurement and Public Private Partnerships Law Review*, 1 (1): 17-35.
- Carpenter, D. P., & Lewis, D. E. (2004). “Political Learning from Rare Events: Poisson Inference, Fiscal Constraints, and the Lifetime of Bureaus.” *Political Analysis*, 12(3): 201-232.
- Coppier, R., & Piga, G. (2007). “Why Do Transparent Public Procurement and Corruption Go Hand in Hand?” In G. Piga and K. V. Thai (Eds.), *The Economics of Public Procurement* (pp. 183-199). New York: Palgrave MacMillan.
- Cox, M. F. (2008). “Supply Chain Compliance.” In A. Tarantino (Ed.), *Governance, Risk, and Compliance Handbook: Technology, Finance, Environmental, and International Guidance and Best Practices* (pp. 507-529). Hoboken, NJ: John Wiley & Sons, Inc.
- Downs, A. (1967). *Inside Bureaucracy*. Boston, MA: Little Brown.
- Ellram, L. M. (1995). “Total Cost of Ownership: An Analysis Approach for Purchasing.” *International Journal of Physical Distribution & Logistics Management*, 25(8): 4-23.
- Fisher, E. (2013). “The Power of Purchase: Addressing Sustainability through Public Procurement.” *European Procurement and Public Private Partnerships Law Review*, 1 (1): 2-7.
- Goldsmith, S., & Eggers, W. D. (2004). *Governing by Network: The New Shape of the Public Sector*. Washington, DC: Brookings Institution Press.
- Gore, A. (1993). *Creating a Government that Works Better and Costs Less: Report of the National Performance Review*. Washington, DC: U.S. Government Printing Office.
- Harland, C., Gibbs, J., & Sutton, R. (2000). “Supply Strategy for the Public Sector: Framing the Issues.” In *The 9th International IPSERA Conference Proceedings*, 24(27): 342-351.
- Harrigan, K. R. (1980). “Strategy Formulation in Declining Industries.” *Academy of Management Review*, 5(4): 599-604.
- Hettne, J. (2013). “Sustainable Public Procurement and the Single Market – Is There a Conflict of Interest?” *European Procurement and Public Private Partnerships Law Review*, 1: 31-40.

- Hood, C. (1995). "The "New Public Management" in the 1980s: Variations on a Theme." *Accounting, Organizations and Society*, 20(2): 93-109.
- Humphreys, M., & Weinstein, J. M. (2007, August). "Policing Politicians: Citizen Empowerment and Political Accountability in Uganda." Paper Presented at the American Political Science Association Meeting, August, Chicago, IL.
- Johnson, P. F. (1999). "The Pattern of Evolution in Public Sector Purchasing Consortia." *International Journal of Logistics: Research and Applications*, 2(1): 57-73.
- Johnson, P. F., Leenders, M. R., & McCue, C. (2003). "A Comparison of Purchasing's Organizational Roles and Responsibilities in the Public and Private Sector." *Journal of Public Procurement*, 3(1): 57-74.
- Kattel, R., & Lember, V. (2010). "Public Procurement as an Industrial Policy Tool: An Option for Developing Countries." *Journal of Public Procurement*, 10(3): 368-404.
- Key, V. O. (1940). "The Lack of a Budgetary Theory." *The American Political Science Review*, 34(6): 1137-1144.
- Leenders, M., & Fearon, H. E. (2008). "Developing Purchasing Foundations." *Journal of Supply Chain Management*, 44(2): 17-27.
- Lember, V., Kattel, R., & Kalvet, T. (2014). "How Governments Support Innovation through Public Procurement: Comparing Evidence from 11 countries." In V. Lember, R. Kattel, and T. Kalvet (Eds.), *Public Procurement, Innovation, and Policy* (pp. 287-309). New York: Springer.
- Ludwig, D. C. (1993). "Adapting to a Declining Environment: Lessons from a Religious Order." *Organizational Science*, 4(1): 41-56.
- MacManus, S. (1992). *Doing Business with Government: Federal, State, Local and Foreign Government Purchasing Practices for Every Business and Public Institution*. New York: Paragon House.
- Mamiro, R. G. (2012). "Regulating Procurement in Commercial Public Entities: Merits and Demerits." Paper Presented at the 5th

International Public Procurement Conference, August, Seattle, WA.

- McCue, C. P., & Pitzer, J. T. (2000). "Centralized vs. Decentralized Purchasing: Current Trends in Government Procurement Practices." *Journal of Public Budgeting, Accounting & Financial Management*, 12(2): 400-420.
- McCue, C. P. (2000). "The Risk-Return Paradox in Local Government Investing." *Public Budgeting & Finance*, 20(3): 80-101.
- McCue, C. P. (2001). "Organizing the Public Purchasing Function: A Survey of Cities and Counties." *Government Finance Review*, 17(1): 9-14.
- McCue, C. P., & Gianakis, G. A. (2001). "Public Purchasing: Who's Minding the Store?" *Journal of Public Procurement*, 1(1): 71-95.
- McCue, C. P., Buffington, K. W., & Howell, A. D. (2003). "The Fraud/Red Tape Dilemma in Public Procurement: A Study of U.S. State and Local Governments." Proceedings of the International Research Study of Public Procurement Workshop (pp. 187-210).
- Moe, T. M. (1984). "The New Economics of Organization." *American Journal of Political Science* 28(4): 739-777.
- Muller, E. W. (1991). "An Analysis of the Purchasing Manager's Position in Private, Public and Nonprofit Settings." *International Journal of Purchasing and Materials Management*, 27(4): 16-23.
- National Association of State Purchasing Officials (1997). *State and Local Government Purchasing: Principles & Practices*. Lexington, KY: Author.
- National Institute of Governmental Purchasing (1989, January 1). *Resolution: Centralized Purchasing*. Reston, VA: Author.
- Ng, C., & Ryan, C. (2001). "Assurance Services in the Australian Public Sector: The Case of Probity Audits." *Managerial Auditing Journal*, 16(1): 69-75.
- Norman, R. (2003). *Obedient Servants? Management Freedoms and Accountabilities in the New Zealand Public Sector*. Wellington, New Zealand: Victoria University Press.
- Osborne, D., & Gaebler, T. (1992). *Reinventing Government*. New York: Addison-Wesley.

- Osborne, D., & Plastrik, P. (1997). *Banishing Bureaucracy: The Five Strategies for Reinventing Government*. New York: Addison-Wesley.
- Olken, B. A. (2007). "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." *Journal of Political Economy*, 115(2): 200-249.
- Pagell, M., Wasserman, M.E., & Wu, Z. (2010). "Thinking Differently about Purchasing Portfolios: An Assessment of Sustainable Sourcing." *Journal of Supply Chain Management*, 46(1): 57-73.
- Palmer, J. W. (2005). *Innovative Behavior of Frontline Employees in the Public Sector*. (Unpublished Doctoral Dissertation). Cincinnati, OH: University of Cincinnati.
- Picci, L. (2007). "Reputation-Based Governance of Public Works." In G. Piga and K. V. Thai (Eds.), *The Economics of Public Procurement* (pp. 159-182). New York: Palgrave MacMillan.
- Preuss, L. (2009). "Addressing Sustainable Development through Public Procurement: The Case of Local Government." *Supply Chain Management: An International Journal*, 14(3): 213-223.
- Qiao, Y., Thai, K. V., & Cummings, G. (2009). "State and Local Procurement Preferences: A Survey." *Journal of Public Procurement*, 9(3 & 4): 371-410.
- Rainey, H. G., Pandey, S., & Bozeman, B. (1995). "Research Note: Public and Private managers' Perceptions of Red Tape." *Public Administration Review*, 55(6): 567-574.
- Rolfstam, M. (2009). "Public Procurement as an Innovation Policy Tool: The role of Institutions." *Science and Public Policy*, 36(5): 349-360.
- Salamon, L. M., & Anheier, H. K. (1998). "Social Origins of Civil Society: Explaining the Nonprofit Sector Cross-Nationally." *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 9(3): 213-248.
- Schapper, P. R., Malta, J. V., & Gilbert, D. L. (2006). "An Analytical Framework for the Management and Reform of Public Procurement." *Journal of Public Procurement*, 6(1): 1-26.

- Schiele, J. J. (2009). "Lean Thinking." *Government Procurement*, 17(4): 10-12.
- Schiele, J. J., & McCue, C. P. (2010). "A Framework for the Adoption of Lean Thinking within Public Procurement." *International Journal of Procurement Management*, 3(4): 379-396.
- Schwartz, J. I. (2010). "Procurement as a Tool for Economic Stimulus: The United States' Experience, 2008-2010." Paper Presented at the International Public Procurement Conference, August, Seoul, South Korea.
- Shed, B. (2001). "Probity Auditing: Keeping the Bureaucrats Honest?" *Australian Journal of Public Administration*, 60(2): 66-70.
- Soudry, O. (2007). "A Principal-Agent Analysis of Accountability in Public Procurement." In P. Piga and K. V. Thai (Eds.), *Advancing Public Procurement: Practices, Innovation and Knowledge-Sharing* (pp. 432-451). Boca Raton, FL: PrAcademics Press.
- Ssenoga, F. (2006). "Examining Discriminatory Procurement Practices in Developing Countries." *Journal of Public Procurement*, 6(3): 218-249.
- Strauss, G. (1964). "Work-Flow Frictions, Interfunctional Rivalry, and Professionalism: A Case Study of Purchasing Agents." *Human Organization*, 23(2): 137-149.
- Tadelis, S. (2012). "Public Procurement Design: Lessons from the Private Sector." *International Journal of Industrial Organization*, 30(3): 297-302.
- Tanzi, V. (2001). *Pitfalls on the Road to Fiscal Decentralization*. Washington, DC: Carnegie Endowment for International Peace.
- Thai, K. V. (2001). "Public Procurement Re-Examined." *Journal of Public Procurement*, 1(1): 9-50.
- Trybus, M. (2006). "Improving the Efficiency of Public Procurement Systems in the Context of the European Union Enlargement Process." *Public Contract Law Journal*, 35(3): 409-425.
- Tucker, T. (1998). "A Critical Analysis of the Procurement Procedures of the World Bank." In S. Arrowsmith and A. Davies (Eds.). *Public*

Procurement: Global Revolution (pp. 139-157). London, UK: Kluwer Law International.

Vagstad, S. (1995). "Promoting Fair Competition in Public Procurement." *Journal of Public Economics*, 58(2): 283-307.

Walker, G., & Poppo, L. (1991). "Profit Centers, Single-Source Suppliers, and Transaction Costs." *Administrative Science Quarterly*, 36(1): 66-87.